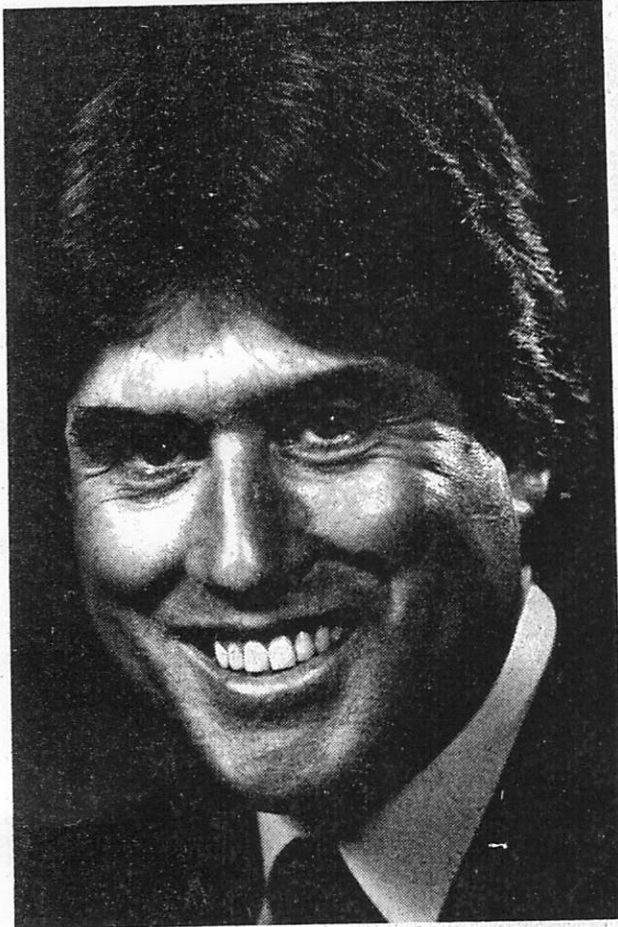


Duxbury Clipper, Thursday, November 5, 1981

Cudmore Designs Prize-Winning Sailboat



Patrick Cudmore

"The World's Fastest Sailboat," a hydrofoil sailboat designed by Patrick Cudmore, Duxbury inventor and architect, has won a place in the prestigious "Spirit of Enterprise: The 1981 Rolex Awards," published by W.H. Freeman and Company.

This book documents the Rolex Awards for Enterprise, an internationally famous competition sponsored by Montres Rolex, S.A. of Geneva, to "encourage the 'Spirit of Enterprise' in individuals around the world by rewarding outstanding personal efforts, or contributions, in selected categories of

human endeavor."

Contestants were invited to submit project proposals within one of 3 broad categories of competition: applied sciences and invention, exploration and discovery, and the environment.

Out of the thousands of competitors from 88 countries, the selection committee chose 168 finalists for inclusion in "The 1981 Rolex Awards" publication. The book contains a 3-page description of Cudmore's proposed project and a color photograph showing a preliminary version of the hydrofoil sailboat being tested on Duxbury Bay.

Cudmore, who lives at High Pines with his wife, Lorraine, and his sons, Sean and Colin, will be profiled this week in the Boston Globe.

Duxbury Clipper, Thursday, December 3, 1981

More on Patrick Cudmore

The Nov. 16 issue of *The Boston Globe* carried a feature article about Patrick Cudmore of High Pines, Duxbury. Here are some excerpts:

Cudmore comes from Pierre, South Dakota, of pioneer stock. During the late 19th century gold rush to the Black Hills, his maternal grandfather, Hormidas Marion, started the first restaurant in Ft. Pierre, which is west of the Missouri River. An island in the river was named after him.

Cudmore's father was a shoe salesman and entrepreneur who invented the field boot -- now worn by engineers and construction workers -- and died when Cudmore was 5. His strong-minded mother, who died in 1978, ran a motel and a ranch. A Sioux Indian woman who had survived the Wounded Knee massacre lived with the family as his nanny, and taught Cudmore the rudiments of the Sioux language. He says that he absorbed from her the Indian belief that nature is sacred, a belief that has in-

fluenced his energy-conserving inventions.

Cudmore briefly attended a seminary, which he explains as a search for a role model to replace his father. He was a cadet at Air Force Academy for a year, which he found stifling, and graduated from Catholic University in Washington, D.C. He received a master's degree in architecture from Harvard.

In 1971, Cudmore set up shop in a north Cambridge church building, which was later demolished as a fire hazard. He and his employees whittled models of the "Cudmore rotary wing" from soap bottles, and the "Skyro" was born. He moved to Duxbury in 1974 and to the beach house in 1978.

Cudmore obtained a bank loan and sold his share of the family ranch in South Dakota to finance the shop, which moved in 1972 to the loft of a paper plant. He also borrowed from friends. "There were very bleak times, when the amount of money he had mattered down to the last penny," says a friend. He is one of America's dwindling band of 2000 fulltime independent inventors.

His 5 foremost inventions:

- "The Skyro," a plastic rotary wing which represents a new method of powered flight, was marketed by Milton Bradley.

- "The Bug-eye," which magnifies an insect 6 times and illuminates it with a special type of glass. It was produced by Milton Bradley.

- "The Skoo," a roller-skate with the maneuverability of an ice skate.

- A simplified rear-view mirror which can eliminate blind spots. He invented it for an automobile company and it may be in use in 1985.

- A hydrofoil sailboat that lifts out of the water even in low winds. (See the Nov. 5 issue of the *Clipper*.)

Duxbury inventor: flights of imagination

DUXBURY — Boggled down in rush-hour traffic?

It's not too difficult to imagine the sensation of crawling along behind an endless line of cars. But imagine being able to flick a switch, step on the gas and — PRESTO — your car is airborne, flying over less fortunate grounded commuters, and, before you know it, you've landed in front of your home.

Patrick J. Cudmore, a 40-year-old Duxbury inventor, has devised a "new kind of rotary wing," and he believes that, one day, commuters will be far above all the bumper-to-bumper nonsense.

The Harvard University School of Design graduate, whose wing and other inventions are on exhibit at the Boston Museum of Science's show, "The Inventor's Mind: A Celebration of Brainpower," believes his new wing design is more compact and efficient than a helicopter rotor.

"This rotary wing could be applied to vehicles no longer or wider than a car. You could, conceivably, take off and land on highways," he said.

Cudmore said the wing design can be applied to several uses — including powered aircraft. Among his inventions incorporating the wing design are a small, collapsible kite, plans for a tethered, flying wing turbine and a aerial plane used for a game of catch.

The theory behind the rotary wing has been tested by the Grumman Aircraft Engineering Co., he said, and an aerospace company has expressed interest in marketing it.

Although none of Cudmore's inventions are being marketed, two of his toys also on display at the Museum of

Science were marketed by a now dissolved division of the Milton Bradley Toy Co.

One of the toy inventions picked up by Milton Bradley is the "Bug Eye," one in a series of light-collecting magnifiers that concentrate light on the object viewed through the lens.

The "Bug Eye" is for viewing insects, and it comes equipped with a trap door and a sponge to keep the creature alive while under scrutiny. "The average backyard has over 2,000 insects, so if you get tired of one model, you can always trade it in for another," he said.

Cudmore's other toy inventions include a cross between a tricycle and a bicycle, called a "Brike." "A small child could safely learn to ride a two-wheeler with the Brike," he said.

Also on exhibit is Cudmore's hydrofoil sailboat that is designed to travel $2\frac{1}{2}$ times faster than the wind.

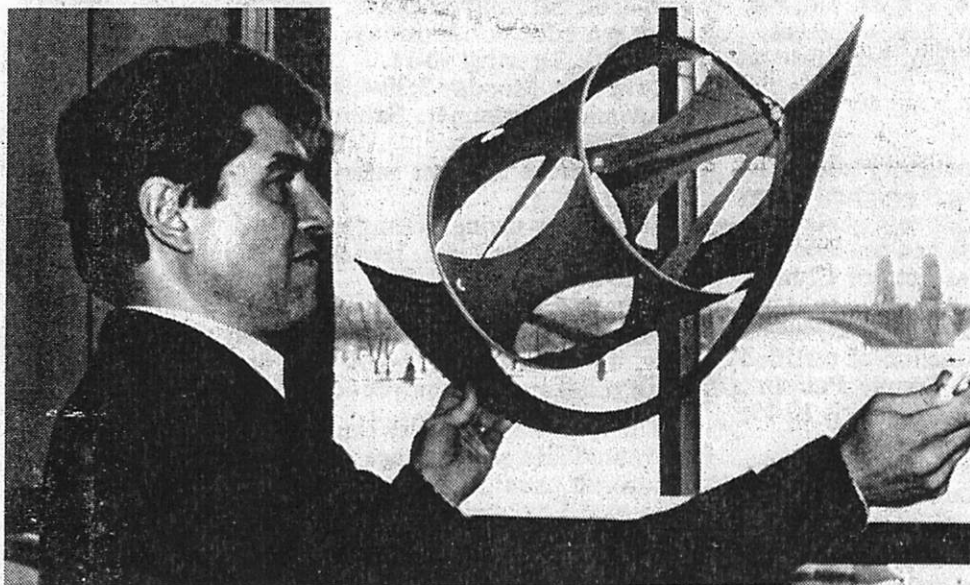
The hydrofoil, which will be on display from Feb. 12 to August, was a finalist in the 1980 Rolex Awards which accepted entries from 88 countries, he said.

"I hope my boat will work well in light winds and do between 10 and 15 knots. I expect it to go close to power boat speeds," he said.

At these speeds, Cudmore said, the boat will begin to hydroplane, or lift out of the water, leaving little surface area to create drag.

Cudmore, who has been inventing for 10 years, lives with his wife, Lorraine, a science writer and author of "Center of Life," and their two teenaged sons, Sean and Colin.

Duxbury Inventor at Museum of Science



Patrick Cudmore, president of Wave-Rider, Inc., Duxbury, holds the kite he designed with a new type of rotary wing, one of several of his inventions now on display at Boston's Museum of Science. Cudmore, winner of the 1981 Rolex Awards for Enterprise, is among those participating in Inventors Weekend, Feb. 5-7, at the science museum.

A feature exhibit of Patrick Cudmore's inventions has opened at the Boston Museum of Science and will continue until March 20. In addition, one of Cudmore's inventions, a hydrofoil sailboat, will be hung in the atrium of the museum's new West Wing through August.

The exhibit of Cud-

more's inventions is one of several events that the Science Museum is sponsoring to highlight "The Inventive Mind -- A Celebration of Brainpower." Last week the museum opened a new permanent exhibit on "The Brain." On Feb. 5, 6 and 7, the museum hosts "Inventors Weekend," where New

England inventors, including Cudmore, will show and explain their inventions to the public. From Feb. 3 to March 17, the museum will have on exhibit "Eureka -- A Celebration of Small Business Inventions."

Mr. and Mrs. Cudmore and their 2 sons, Sean and Colin, live at High Pines.

PEOPLE - CUDMORE

ATTACH TO ARTICLE ABOUT PATRICK CUDMORE

LETTERS TO THE EDITOR

Intent of comments misconstrued

In the Nov. 16 Centerpiece article, "The world of 'Skyro' and 'Skoo'," on the life and work of Patrick Cudmore, certain comments were attributed to me.

When I was interviewed by Dan Golden, I did make some critical remarks regarding a kite-development program my company, Synestructics, attempted with Cudmore.

However, the article takes the intent of my comments out of context. Implied by the paragraph in which I am ostensibly quoted is the suggestion that all of Cudmore's ideas are suspect, that because of the self-taught nature of his technical background, his ideas are not well founded, and that the underlying principles upon which his ideas may be based are never verified.

I do not believe this to be the case for the majority of inventions resulting from Cudmore's fertile mind. Indeed, it is likely that because he is "self-taught" in certain technical areas, he is able to make intuitive leaps missed by others. This results primarily from asking

original questions about particular problems.

My direct experience with Cudmore was extremely limited, with a modest program involving a very short development cycle. Although my experience did not provide the intended result, I do not wish, as the only individual quoted in the article, to leave the reader with the feeling that Cudmore's ideas and skills are to be taken lightly.

I have a familiarity with the drift of the body of his work and it remains impressive and credible. The comment that was attributed to me, "He understands his inventions less than he would have you believe," I did not say. On the whole, Cudmore has a remarkably good understanding of his inventions and certainly, as a person of high integrity, does not engage in the deliberate misrepresentations implied by the comment in question.

PETER PEARCE

President

Synestructics, Inc.

Chatsworth, Calif.